

No. 7 — Notes on the Spiders of the Virgin Islands

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The Virgin Islands, a group of small islands in the West Indies, lie south and east of Puerto Rico. The fifty or more islands cover approximately two hundred and fifty square miles. The largest, St. Croix, St. Thomas and St. John, have been inhabited for many years, and at times have been intensively cultivated.

The first comprehensive study made of the Virgin Island spiders was by Dr. Alexander Petrunkevitch, whose "Spiders of the Virgin Islands" was based on a collection made by himself in September, 1925, and one made by Dr. Clarence R. Shoemaker in 1915. These two collections contained thirty-five species, of which eleven were described as new, eight from the Shoemaker collection. Twelve species had been recorded by earlier writers. Some of these have been found since on other islands, but four have never been recognized again. Of these four, three were described by C. Koch in "Die Arachniden", 1836-1848, *Mygale drassiformis*, *Evophrys vetusta* and *Marpissa incerta*. The descriptions are vague and the figures are poor, so unless the type specimens are still in existence, the species will probably remain unidentifiable. The fourth, *Trochanteria ranuncula* Karsch, 1879, was in a paper of descriptions of miscellaneous spiders, mostly from the far east, with the locality, "Sta. Cruz." The species has never been found since, and it is possible that it is from another place of the same name.

Aside from miscellaneous material, the Museum of Comparative Zoölogy has two collections of spiders from the Virgin Islands. The first was received from Dr. C. R. Wilson in 1922, while he was at the United States Experiment Station, St. Croix. It is a small collection, but each specimen has complete data. The second collection was received recently from Harry A. Beatty of Christiansted, St. Croix. The specimens are from that island. It contains a large number of very small spiders that are usually overlooked by casual collectors. The Wilson and Beatty collections contain sixty-eight species, seventeen of which are new. So today the list of Virgin Island species numbers ninety-three, including the four uncertain ones. Although obviously not exhaustive, since all collections have been from the three largest islands only, we now have a substantial basis for a study of the spider fauna of the island, and its comparison with those of other islands of the West Indies.

Of the sixty-nine species that have been examined, forty-six are found in Puerto Rico. This is not unexpected, as Puerto Rico is the nearest large island, and its spider fauna has been studied recently by Dr. Petrunkevitch. Some of these Puerto Rico species are common house spiders and were probably introduced by commerce, as they are found in warm areas over the world. Others are confined to the New World and four are known only from these two West Indian island groups, though an extended survey of adjacent islands may show that they are more widely distributed.

The only other island of the Lesser Antilles that has been intensively collected is St. Vincent, with about the same area as that of all the Virgin Islands combined. It is directly west of Barbadoes and much nearer to South America. H. H. Smith, a well known entomological collector, was sent there by a joint committee of the British Museum and the British Association for the Advancement of Science, and his spider collection was divided between M. Simon and the Peckhams. The latter described the family *Salticidae* and the results were published in the Proc. Zool. Soc. London in 1893. Fourteen species were recognized, of which twelve were new. Simon described the other families in three papers in the same publication in 1891, 1894 and 1897. The two authors recorded one hundred and forty-nine species in all, of which ninety-six were new.

Of these one hundred and forty-nine species found on St. Vincent, twenty-seven have been taken on the Virgin Islands. Possibly ten genera are common to the two groups, each represented by an indigenous species.

About the same time that Simon was working on the St. Vincent fauna, he was studying collections made by himself at several places in Venezuela, and he found several genera common to the two places. This was especially noticeable in the very small spiders of the family *Oonopidae*. In a few cases, the same species was found in both places, and have since been found to be widespread. It is curious that none of these species have been found in the Virgin Island collections. Among other small species, Simon described a new genus, *Thallumetus*, (*Dietymidae*), on males found at several places in Venezuela. Later, he described two more species from Chile in the same genus. Among the very small species in the Beatty collection from St. Croix, are males and females of this genus, the first time it has been recorded outside South America.

In conclusion, I especially wish to express my gratitude to Mr. Nathan Banks for his unfailing interest and help in preparing this

paper, and to Dr. Clarence R. Shoemaker, who so kindly made possible the examination of certain Petrunkevitch types in his collection. Thanks are also due to Dr. W. J. Gertsch, who kindly sent me drawings of a type in the American Museum of Natural History.

The following spiders from the Virgin Islands have been seen by me. The sex and the type locality follows the original description.

Sub-order MYGALOMORPHAE

Family THERAPHOSIDAE

Genus CYRTOPHOLIS Simon 1892

CYRTOPHOLIS PELUS Chamberlin

Cyrtopholis pelus Chamberlin, 1917, p. 42, pl. 2, figs. 8-10. "♀ St. Thomas"

Sub-order ARACHNOMORPHAE

Family FILISTATIDAE

Genus FILISTATA Latreille 1810

FILISTATA HIBERNALIS Hentz

Filistata hibernalis Hentz, 1842, p. 227, pl. 8, fig. 6; reprint, p. 23, pl. 2, fig. 6.

"♀ South Carolina on the sea coast"; Petrunkevitch, 1926, p. 27.

♀ s St. Croix, (Wilson, Beatty)

Family OONOPIDAE

Species of the family Oonopidae are found in the dry vegetable detritus in warm countries. Even adults are very small. The largest species known is only 4.0 mm. and the smallest is less than a millimeter. Very few are found in temperate zones, and because they are so small, they are easily overlooked by the casual collector. Few species were known before the collection from St. Vincent was made by H. H. Smith. Simon proposed eight new genera for thirteen new species. One Old World genus was recognized, as well as one species described by Keyserling from Colombia. Among them, Simon found several that he had collected a few years before in Venezuela. Most are based on both male and female.

Whether extensive collections from the various islands of the West Indies will show that many of the genera are endemic is uncertain. Dr. Petrunkevitch found five species on Puerto Rico. Two of these

occur on St. Vincent, *Ischnothyreus peltifer* and *Heteroonops spinimanus*. Of the other three, one female was so unusual that a new genus was erected for it, and the two others belong to genera found on St. Vincent, *Opopaea* and *Stenoonops*. Eight species have been reported from Cuba, of which four are common to Puerto Rico, *Oonopinus minutissimus*, *Heteroonops spinimanus*, *Ischnothyreus peltifer* and *Opopaea lutzi*. For the remaining four, it was necessary to establish two new genera for two species, another belonged to the widespread genus *Opopaea*, and the fourth to the genus *Tetramblemma* O. P. Cambridge, 1873, based on a male from Ceylon.

The collection made by Beatty is unusually rich in specimens of this family, but strangely, it has none of the species reported from Puerto Rico, Cuba or St. Vincent.

Both keys to the family *Oonopidae* in the *Histoire Naturelle des Araignées* are full of inaccuracies and are very confusing to use. Also, the adjectives "high" or "low" in referring to the cephalothorax are misleading until enough specimens have been handled to distinguish between the two extremes. As Simon states in a footnote, the same characters are often found in the two sections of the family, (the hard and the soft bodies) and it is questionable if the possession or lack of a dorsal shield on the abdomen is of generic value, especially as it is a character that is sometimes wanting in the females. (Compare *Ceraticelus*, *Linyphidae*).

The relative size and position of the eyes, possession of spines on the anterior legs, the elongate patellae of the anterior legs, and the globose or elongate coxae, seem to be characters that are constant in both male and female.

Key to the genera of OONOPIDAE of the Virgin Islands

- | | | |
|---|---|-------------------|
| 1 | Abdomen with no dorsal shield | 2 |
| | Abdomen with dorsal shield | 4 |
| 2 | Anterior tibiae and metatarsi with paired ventral spines, ♀ ; p.l.e. separated from p.m.e. | <i>Telchius</i> |
| | Anterior tibiae and metatarsi not spined | 3 |
| 3 | Cephalothorax rather low, posterior row of eyes cover less than half width of head, p.m.e. a broad oval | <i>Oonopinus</i> |
| | Cephalothorax high, posterior row of eyes cover width of head, p.m.e. a narrow oval | <i>Stenoonops</i> |
| 4 | Anterior tibiae and metatarsi with paired spines | <i>Dysderina</i> |
| | Anterior tibiae and metatarsi not spined | 5 |

- 5 Ventral scutum about square, followed by a very narrow scutum, (♀), anterior patellae elongate and flattened dorsally. *Scaphioides*
 Ventral scutum extends beyond middle 6
- 6 Abdomen cylindrical, ventral scutum extends beyond the middle, no inframammillary scutum, legs long *Hytanis*
 Abdomen flattened, ventral scutum extends almost to spinnerets, small inframammillary scutum, legs short *Gamasomorpha*

Genus STENONOPS Simon 1891

STENONOPS NITENS spec. nov.

Figures 5, 10

Male. Length, 1.3 mm.

Cephalothorax deep yellow, granular, so that lateral margins are roughened, high, posterior fifth falling abruptly to margin, four-fifths as wide as long, anterior margin narrow, posterior margin truncate; eyes almost cover width of head, all eyes heavily ringed with black, a.l.e. round, separated by a line, largest of the six, posterior row slightly recurved, eyes touching because of black rings, p.m.e. elliptical, twice as long as wide and touching for some distance, p.l.e. round, little more than short diameter of p.m.e.; *clypeus* convex, about equal to diameter of a.l.e.; *mandibles* small, weak and cone-shaped; *labium* wider than long, fused to sternum; *maxillae*, distal half much narrowed and inclined over labium; *sternum* two-thirds as wide as long, margin strongly lobed between coxae with a distinct lump opposite each coxa, tip pointed, IV coxae separated by more than a diameter, all coxae sub-globose; pedicel rather long; *abdomen* flesh-color, oval, smooth and shining with a slight iridescence, epigastric scutum faintly marked, spinnerets long, a pair of dark sacs beneath the skin separated by their diameter just anterior to spinnerets; *legs*, 4-1-2-3, varying little in length, no spines and rows of fine hairs, anterior patellae slightly elongate; *palpus*, pale, large, femur slender, patella and tibia sub-equal, little longer than diameter, cymbium and bulb united, with a few slender hairs on dorsal half and two very slender points at tip.

Female. Length, 1.4 mm.

Same as male; epigastric scutum not very distinct but the dark sacs anterior to spinnerets more distinct.

Holotype ♂ St. Croix, (Beatty)

Allotype ♀ St. Croix, (Beatty)

Paratypes 3 ♂ 1 ♀ St. Croix, (Beatty)

Stenoonops nitens differs from the genotype in its smaller size and the slightly recurved posterior eye row, but it agrees with it in the elongate patellae of the anterior legs and the same curious palpus. This type of palpus has been found in species of *Ischnothyreus*, *Scaphiella*, *Oonopinus* and *Dysderina*. Simon only mentions one protruding point at the tip of the bulb in *Stenoonops scabicultus* from St. Vincent and *S. nitens* has two.

Genus OONOPINUS Simon 1892

OONOPINUS PRETIOSUS spec. nov.

Figures 2, 9

Male. Length, 1.2 mm.

Cephalothorax dull yellow, two-thirds as wide as long, smooth, rather low, anterior margin less than half the greatest width; *eye area* black, eyes cover less than half the width of head, a.l.e. largest of the six, round, separated by a radius, posterior row straight or very slightly recurved, p.m.e. a broad oval, touching, p.l.e. round, about equal to short diameter of p.m.e. and separated from them by a line; *clypeus* convex, with a few long hairs on margin, higher than diameter of a.l.e.; *mandibles*, long, cone-shaped, weak, fang long; *labium* about as wide as long, fused to sternum; *maxillae* with distal half narrowed, parallel, twice as long as labium; *sternum* convex, more than half as wide as long, tip pointed, lateral margins lobed with a distinct hairy point between II and III coxae, anterior coxae elongate, posterior sub-globose; *abdomen* white, cylindrical, fully twice as long as wide, with a few dark hairs at tip, hairs more numerous on venter, just anterior to spinnerets a pair of dark sacs beneath the skin; pedicel very short; *legs* not differing greatly in length; *palpus* short, white, cymbium and bulb fused, so that palpus looks not fully developed, patella and tibia subequal, with many dark hairs, cymbium at base two-thirds as thick as long, tip pointed with embolus at tip, a white curved tube.

Female. Length, 1.5 mm.

Female the same as the male with abdomen longer, flesh-colored and the dark sacs on venter more distinct than in the male.

Holotype ♂ St. Croix, (Beatty)

Allotype ♀ St. Croix, (Beatty)

The genus is based on a European species, but in the same paper, Simon described a male and a female in the same genus from Vene-

zuela. This species is twice as large as *Oonopinus pretiosus*, and the figure of the palpus shows the femur enlarged, patella greatly swollen and the bulb long and slender, extending at right angles from the cymbium. No mention is made of the sternum.

Genus TELCHIUS Simon 1892

TELCHIUS PLACIDUS spec. nov.

Figures 3, 4

Male. Length, 1.4 mm.

Cephalothorax pale yellow, sides with short dark hairs that are thickest about posterior margin, four-fifths as wide as long, rather low, sloping gradually from the anterior margin to within one-quarter of posterior margin where it falls rapidly, anterior margin narrowed, no thoracic groove; *eye area* not covering entire width of head, a.l.e. sub-rotund, convex, separated by about a radius, posterior row of eyes recurved, p.m.e. a broad oval, touching, p.l.e. round, about equal to short diameter of p.m.e., narrowly separated from p.m.e. and a little smaller than a.l.e.; *clypeus* convex, about as high as diameter of a.l.e., many long hairs on margin; *mandibles* vertical, cone-shaped; *labium* fused to sternum, wider than long; *maxillae* about twice as long as labium, almost parallel; *sternum* heart-shaped, convex, with a few long hairs about margins, margin not lobed, IV coxae separated by less than a diameter, anterior coxae elongate, posterior sub-globose; *abdomen* oval, flesh-colored with four pairs of faint darker spots, venter with scanty hairs and a pair of dark marks anterior to the spinnerets; *legs*, posterior pairs longest, anterior patellae long, tibia and metatarsus sub-equal, no spines but many hairs, posterior pairs with slender, unpaired spines on tibia and metatarsus; *palpus*, femur slender, patella and tibia sub-equal, each a little longer than their diameter, tarsus covering about half of the bulb, bulb much swollen at base, extending to a point, embolus at tip, a slender dark spine.

Female. Length, 1.5 mm.

Cephalothorax, *eyes* and *abdomen* same as in male, spinnerets longer; *legs*, anterior pairs with slender spines beneath tibia and metatarsus, tibia, ventral, 2-2, metatarsus, ventral, 2-2, posterior pairs with irregular spines; *epigynum* a straight, transverse slit with margins chitinized.

Holotype ♂ St. Croix, (Beatty)

Allotype ♀ St. Croix, (Beatty)

The genus is based on a female from Algeria described in a footnote in Simon's first paper on Spiders from Venezuela, (Ann. Soc. Ent. France, 1892, 61, p. 446.) In the text, a second species, also a female is described. The genus differs from *Oonops* by the almost parallel maxillae, slender spines on the anterior legs and the elongate patellae of the anterior pairs. The male of this species has no spines on the anterior tibiae but the female has two pairs. The pair apparently belong together, as the eyes are the same, both have short hairs on the cephalothorax and the abdomen.

Genus DYSDERINA Simon 1891

DYSDERINA ANTILLANA spec. nov.

Figures 1, 7

Male. Length, 1.5 mm., ceph. 0.7 mm., abd. 0.7 mm.

Cephalothorax olive-brown, darker about lateral margins, nine-tenths as wide as long, head narrowed, carapace very high, rising from eye area to one-fifth from posterior margin where it falls abruptly; *eyes* cover fully one-half the width of the head, a.l.e. largest of the six, round, narrowly separated, posterior row straight, only slightly longer than anterior row, p.m.e. a broad ellipse, touching for some distance, p.l.e. round, smaller than a.l.e. and touching p.m.e.; *clypeus* equals about a radius of a.l.e., slightly convex; *mandibles* vertical, cone-shaped, pale, with a small dark hook that projects forward at base of the fang, fang groove short; *labium* pale, fused to sternum, one-half as long as wide, sides parallel; *maxillae* slightly inclined, distal half very narrow and parallel; *sternum* as wide as long, widest between II and III coxae, squarely truncate between IV coxae, convex, smooth, no hairs, IV coxae separated by a diameter and a half; *abdomen* almost two-thirds as wide as long, cylindrical, an olive-brown scutum covers two-thirds of dorsum, sides iridescent white with a few hairs, ventral scutum only slightly chitinized, extends from pedicel to within one-third of the spinnerets for almost the entire width of the abdomen, tip truncate, each side of the spinnerets a pair of dark saes beneath the skin, spinnerets long; *legs*, III right and IV left missing, all coxae sub-globose, legs slender, pale, anterior patellae not elongate, spines, I pair, femur, 1-1 prolateral near tip, tibia, ventral, 2-2-2-2, long and overlapping, metatarsus, ventral, 2-2, long and overlapping, posterior pairs spineless; *palpus*, small, slender and dark.

Holotype ♂ St. Croix, (Beatty)

Simon based the genus *Dysderina* on three species found at St. Vincent, two that were new and a third that was originally found by Keyserling in Colombia and described in the genus *Oonops*. A year later, Simon described another species from Venezuela. Today, the genus is recognized as widely distributed, and has been divided in two sections, the first, with the posterior row of eyes straight, eyes large and contiguous and the a.l.e. separated by less than their diameter; the second section, with the posterior row of eyes procurved, p.l.e. a little separated from p.m.e. and a.l.e. separated by more than their diameter. *Dysderina antillana* belongs to the first section. It differs from its relatives in the small size and the palpus. As far as known, no species has been found with a hook on the mandibles above the base of the fang but this could be easily overlooked in so small a spider. However, it is very distinct under high magnification because of the dark color.

Genus GAMASOMORPHA Karsch 1881

GAMASOMORPHA PERPLEXA spec. nov.

Figures 11, 12, 18

Male. Length, 1.5 mm., ceph. 0.8 mm., abd. 0.7 mm.

Cephalothorax bright brown, two-thirds as wide as long, (3 : 4.5), sparsely punctate, anterior margin narrowed, posterior margin slightly concave, no thoracic groove, carapace slopes gradually from anterior margin to within one-tenth of posterior margin, where it falls rapidly in a concave slope; *eyes* not covering entire anterior margin, a.l.e. largest of the six, separated by a little more than a radius, posterior row almost straight or slightly recurved, p.m.e. a broad ellipse, touching, p.l.e. round, less than a short diameter of p.m.e. and touching p.m.e.; *clypeus* narrow, less than a radius of a.l.e.; *mandibles* vertical, small and cone-shaped; *labium* almost triangular, fused to sternum; *maxillae* about twice as long as labium, inclined, narrow and lateral margins almost parallel; *sternum* triangular, more than two-thirds as wide as long, (2 : 2.5), convex and smooth, lateral margins distinctly lobed and area between elevated, tip truncate, IV coxae separated by more than a diameter; pedicel short; *abdomen* oval, brown, scutum covers entire dorsum, flat, punctate, probably in life a small hair from each pit as a few remain above spinnerets, venter almost completely covered by a scutum which meets the dorsal scutum at base and shows no opening for lung slits, a small infra-mammillary scutum on ventral side of spinnerets; *legs* short, pale brown, no spines, anterior coxae

elongate, posterior coxae globose, femora only slightly enlarged and laterally compressed; *palpus*, very dark brown, small and rather short, femur not enlarged, tibia globose, patella a little longer than tibia, tarsus with a dorsal row of seven clavate hairs, tarsus longer than tibia plus patella, palpal organ extends beyond cymbium almost the length of the tarsus, embolus at tip.

Female. Length, 1.5 mm.

Female the same size as the male with the same scuta and eyes as in the male; ventral scutum apparently divided at fold and the opening of the epigynum a small round depression in a pale area just posterior.

Holotype ♂ St. Croix, (Beatty)

Allotype ♀ St. Croix, (Beatty)

Paratypes 2 ♀ St. Croix, (Beatty)

According to the definition of the genus in the *Histoire Naturelle des Araignées*, 1893, 1, p. 301, there is great variation in the size of the eyes of the posterior row, height of the clypeus, but the coxae are all globose. This species differs in having the anterior coxae elongate and a greater discrepancy in the size of the eyes of the posterior row than usual, but the legs are short and there is an infra-mammillary scutum.

Genus HYTANIS Simon 1892

HYTANIS PUSILLA spec. nov.

Figures 13, 14

Female. Length, 1.5 mm., ceph. 0.5 mm., abd. 1.6 mm.

Cephalothorax golden-brown, with a few long hairs, irregularly placed, almost as wide as long, (4.2 : 4.5), convex, but not very high, slopes gradually from anterior margin to opposite III pair of legs when it falls rapidly to posterior margin, anterior margin about half the greatest width, no thoracic groove; *eyes*, a.l.e. largest of the six, separated by two-thirds of a diameter, posterior row slightly recurved, longer than anterior row, p.m.e. a broad ellipse, touching, p.l.e. separated from p.m.e. by a little more than a line, smaller than a.l.e.; *clypeus* equals about a diameter of a.l.e., convex; *mandibles* long, cone-shaped, fang groove short; *labium* wider than long, fused to sternum; *maxillae* short, about one and a half times as long as labium, slightly inclined; *sternum* as wide as long, anteriorly truncate, lateral margins almost parallel, not emarginate between coxae, strongly convex, with a few long hairs, IV coxae separated by more than a diameter; *abdomen* more than twice as long as wide, convex, dorsum covered by a reddish-

brown scutum, sparsely punctate with a long colorless hair from each depression, a faint pattern can be traced on the scutum with a median pale stripe and darker spots each side, ventral scutum from pedicel to fold, followed by a paler scutum which passes the middle of venter, no scutum about spinnerets; *legs*, IV leg longest, all coxae sub-globose, femora only slightly compressed, patellae not greatly elongate, all legs with many long colorless hairs or bristles, no spines.

Holotype ♀ St. Croix, (Beatty)

The genus *Hytanis* was based by Simon on a female from Puerto Cabello, Venezuela. Both the generic and specific descriptions are very brief. It is compared with *Gamasomorpha*, but no mention is made of the ventral scutum. The elongate abdomen is not common in the *Oonopidae*. It cannot be placed in the genus *Gamasomorpha* because the ventral scutum is short and the infra-mammillary scutum is lacking; also the legs are long and slender.

Genus SCAPHIOIDES genus nov.

Cephalothorax moderately high; eye area covering about half the anterior margin, a.l.e. largest of the six, posterior row straight, p.m.e. an elongate ellipse and touching for some distance, separated from p.l.e. by little more than a line; all coxae sub-globose; sternum convex and lateral margins carried between coxae; abdomen, (female), with no dorsal scutum, epigastric scutum about square, from pedicel to epigastric fold, followed by a very narrow scutum which is little more than a line; legs spineless, anterior patellae elongate and dorsally flattened; male unknown.

Genotype *Scaphioides reducta* spec. nov.

This genus differs from *Scaphiella* Simon in the abbreviated ventral scutum in the female and the greatly elongate p.m.e.; it agrees with that genus in the straight posterior eye row and the elongate anterior patellae.

SCAPHIOIDES REDUCTA spec. nov.

Figures 6, 8

Female. Length, 1.6 mm., ceph. 0.5 mm., abd. 1.0 mm.

Cephalothorax golden-brown, sides granular, almost three-quarters as wide as long, anterior margin much narrowed, posterior margin convex, moderately high, slopes gradually from anterior margin to within one-fifth of posterior margin when it falls rapidly in a convex slope; *eye area* covering about half the width of the head, a.l.e. largest

of the six, separated by a line, posterior row straight, longer than anterior row, p.m.e. a narrow ellipse, touching for some distance, p.l.e. round, little less than long diameter of p.m.e. and separated from p.m.e. by a line; *clypeus* convex, a little higher than diameter of a.l.e.; *mandibles* small, vertical; *labium* as long as wide, tip much narrowed; *maxillae* inclined over labium, but tips not touching, distal half much narrowed; *sternum* strongly convex, granular, lateral margins carried between coxae, IV coxae separated by more than a diameter, all coxae sub-globose; *abdomen* flesh-color, oval, convex, sparsely covered with short hairs, venter paler, with short hairs, a square scutum from pedicel to fold, followed by a scutum that is little more than a line, spinnerets short, each side, beneath the skin an irregular dark sac; *legs* moderately long, anterior patellae elongate and dorsally flattened, I patella three-quarters as long as I tibia, no spines but rows of short, colorless hairs; *epigynum* a long, transverse slit between epigastric scutum and the very narrow ventral scutum.

Holotype ♀ St. Croix, (Beatty)

Paratype ♀ St. Croix, (Beatty)

Family CAPONIIDAE

Genus CAPONINA Simon 1891

CAPONINA BLANDA spec. nov.

Figure 17

Male. Length, 4.6 mm., ceph. 2.1 mm., abd. 2.5 mm.

Cephalothorax bright orange, smooth, no hairs, oval, convex, more than two-thirds as wide as long, (4.5 : 6.0), anterior margin rounded and narrow, no thoracic groove; eyes on a black spot, two, round, separated by about a radius; *clypeus* at least three times the diameter of an eye, convex and sloping; *mandibles* vertical, shining, cone-shaped, fang groove short; *labium* longer than wide, fused to sternum; *maxillae* only little longer than labium, curved, so that tips almost meet, palpi inserted above the middle, distal half very little narrowed; *sternum* deep orange, shining, oval, about half as wide as long, lateral margins indentate, flat, IV coxae separated by more than a diameter; *abdomen* oval, dull green, scantily covered with short colorless hairs, venter little paler than dorsum; *legs* little paler than cephalothorax, 4-1-2-3, little difference in length, no spines and few hairs, I coxa longer than IV coxa, III coxa much smaller than others; *palpus* as long as cephalo-

thorax, pale yellow, femur long and slender, with no rasping spur, tibia longer than patella, cymbium as long as patella plus tibia, bulb globose and protruding from the cavity, embolus a pale, stout tube which leaves the bulb at base and becomes free before the middle.

Holotype ♂ St. Croix, (Beatty)

The genus *Caponina* was based by Simon on a female from St. Vincent. *Caponina blanda* differs in several points from the generic description, but these differences may be sexual. *Caponina testacea*, the genotype, is described as having the clypeus scarcely twice as high as the diameter of an eye and subvertical, the sternum is convex. In *Caponina blanda*, the clypeus is fully three times the diameter of an eye, and it is convex and sloping, the sternum is flat. The genus includes very few species, and the sexes are rarely found together.

Family OECOBIIDAE

Genus OECOBIUS Lucas 1845

OECOBIUS BENNERI Petrunkevitch

Oecobius benneri Petrunkevitch, 1929, p. 75, figs. 64-66. "♀ Puerto Rio; Rio Piedras"

Oecobius parietalis Petrunkevitch, 1926, *nec* Hentz, 1850.
♀ St. Croix, (Beatty)

Family LYCOSIDAE

Genus LYCOSA Latreille 1804

Key to Females

1. Cephalothorax with a narrow median pale stripe extending to anterior eye row *atlantica*
Cephalothorax with median pale stripe as wide as space between p. l. e. 2
2. Sternum with a dark stripe 3
Sternum pale 4
3. Venter almost covered with a dark spot *sancti-vincenti*
Venter pale *sancti thomasi*
4. Anterior tibiae with small weak spines, spider about 20.0 mm. long *reducta* spec. nov.
Anterior tibiae with normal spines, spider about 12.0-13.0 mm. long *subtilis* spec. nov.

Three species of *Lycosa* with a dark stripe on the sternum have been described from the West Indies. Two of these have a dark spot on the venter and all have an angulate tip to the basal spear-mark on the abdomen.

Lycosa sancti-rincenti Simon was described from both male and female, but no figures are given of the palpus and the epigynum. This species has three pairs of ventral spines on the first tibia and two prolateral spines. It is possible that *Lycosa yaucensis* Petr. from Puerto Rico is a synonym. This is described with one prolateral spine on the first tibia.

Lycosa sancti thomasi Petr., 1926, known only from the type, is about the same size, but all the dark marks are very faint, and the dark basal spear-mark on the abdomen fades about the middle, so that the tip cannot be seen. The prolateral spines on the first tibia are confusing as one leg has one spine and the other has two.

From the descriptions of all three species, the epigynum has the median septum slightly angulate about the middle.

LYCOSA ATLANTICA Marx

Lycosa atlantica Marx, 1889, p. 100, pl. 4, fig. 4. "♀ Bermuda"
5 ♀ St. Croix, (Beatty)

LYCOSA REDUCTA spec. nov.

Figure 25

Female. Length, 19.0 mm., ceph. 9.5 mm., abd. 8.5 mm., I tib. 5.0 mm.

Cephalothorax mahogany-brown, median pale stripe from p.l.e., margins gradually converging to posterior margin, in anterior half a pair of narrow dark stripes that do not reach the thoracic groove, a very narrow median stripe of white hairs from p.l.e. to anterior eye row, lateral pale stripes not as wide as dark stripe, with irregular margins, sides below eyes covered with fine white hairs; *eyes*, anterior row not as wide as second row, eyes equidistant, a.m.e. larger than a.l.e., eyes of second row separated by less than a diameter; *mandibles* dark brown, geniculate, three teeth on each margin; *abdomen* with a median spear mark that does not reach middle, tip forked, surrounded by a pale stripe, posterior half mottled and cross bars vaguely indicated, sides grayish-brown, entire dorsum with many long bristles, venter pale; *legs* with the two terminal joints darker, posterior femora with broken

dark rings on dorsal side, spines, no spines on anterior patellae, posterior patellae with 1 prolateral and 1 retrolateral, I pair, tibia, dorsal, 0, prolateral, 2, retrolateral, 0, ventral, 2-2-2, all spines very slender and weak, less than one-half the diameter of the joint, area between ventral spines thickly covered with short, white hairs, metatarsus, dorsal, 0, lateral, 0, ventral, 2-2, in a thick scopula, so that spines are hidden, basal and median, both pairs very small, II pair, spines the same as on I pair, but longer and scopula not as heavy, III and IV tibiae with a dorsal, basal spine, all spines on posterior pairs are long and heavy; *epigynum* very similar to *Lycosa subtilis* spec. nov. (cf. *postea*).

Holotype ♀ St. Croix, (Beatty)

This species is very near *Lycosa subtilis* but is much larger. The legs in proportion are shorter and stouter, the spines on the anterior tibiae and metatarsi are small and weak, and the anterior metatarsi have a thick scopula. *Lycosa aussereri* (Keys.) from Colombia is about this size, but the spines of the anterior tibiae and metatarsi are described as small and weak. Banks identified three specimens from Culebra and Vieques Islands as this species. Petrunkevitch mentions them in "The Spiders of Porto Rico", 1929, p. 91 and regarded them as probably *Lycosa fusca* (Keys.), 1876, described from Cuba. They are probably not *Lycosa aussereri* from Colombia, but it is equally questionable if they are *fusca*. The two islands lie between Puerto Rico and St. Croix, and they may prove to be *reducta*.

LYCOSA SANCTI THOMASI Petrunkevitch

Lycosa sancti thomasi Petrunkevitch, 1926, p. 67, fig. 22. "♀ St. Thomas"

Through the kindness of Dr. Shoemaker, I have been able to examine the unique type specimen.

The dark markings on the cephalothorax and abdomen are rather obscure; the median pale stripe on the cephalothorax is very little constricted anterior to the groove and the narrow pale lateral stripes are only faintly indicated; the abdomen has a dark basal mark that disappears about the middle, the dark median spot on the sternum is very faint and the entire venter is pale. The specimen has not oviposited.

The spines on the legs are confusing. The anterior patellae have no spines, the first tibia has three pairs of ventral spines, and the left leg one small prolateral spine beyond the middle ventral pair, the right leg has two prolateral spines, one beyond the middle pair and one much nearer the base. It is possible that one leg has been replaced but as

there is no difference in length or size, it is impossible to say which leg has been renewed.

LYCOSA SANCTI-VINCENTI Simon

Lycosa sancti-vincenti Simon, 1897, p. 888. "♂ ♀ St. Vincent"

It is not impossible that Dr. Petrunkevitch had a small, pale specimen of this species from Puerto Rico, when he described *Lycosa yau-censis*. The Simon type is 12.0 mm. long, the venter is black and the sternum is black with a yellow margin; spines, I pair, patella, prolateral 1, tibia, ventral, 2-2-2, prolateral, 2 small spines, metatarsus, ventral, 2-2, apical whorl of 3 spines; epigynum is much longer than wide, subparallel and the margins reddish. Four specimens from St. Croix, collected by Dr. Wilson in 1922, and one from Antigua, collected in 1918, answer this description. A single specimen from St. Croix, collected by Beatty is smaller, (9.5mm.) and agrees very well with the description of *Lycosa yaucensis* Petr. The smaller specimen has irregular brown marks on femora and tibiae and the first tibia has but one prolateral spine. The figure of the epigynum has the median septum broad, slightly wider and angulate about the middle. All specimens seen have the same epigynum with the margin of the septum heavily chitinized.

4 ♀ St. Croix, (Wilson)

1 ♀ St. Croix, (Beatty)

LYCOSA SUBTILIS spec. nov.

Figures 16, 19

Female. Length, 12.5 mm., ceph. 6.6 mm., abd. 6.5 mm., I tib. 3.1 mm.

Cephalothorax with median pale stripe from p.l.e., narrowing before the thoracic groove, anterior half of pale stripe with narrow curved dark stripes ending opposite I coxae, lateral pale stripes rather broad, dark stripes covered with dark, short hairs; *eyes*, anterior row shorter than second row, eyes equidistant, a.m.e. separated by a radius, larger than a.l.e., eyes of second row separated by less than a diameter, scattered white hairs and longer bristles in eye area; *mandibles* mahogany-brown, geniculate, with many coarse dark bristles and shorter white hairs, fang groove oblique, thick scopula of long hairs at base of fang on superior margin, three teeth on each margin; *labium* longer than wide, lateral margins deeply notched at basal half, tip rebordered;

maxillae twice as long as labium; *abdomen* oval, dark basal mark extends to middle with tip truncate and each lateral corner extended in a diagonal line that connects with lateral stripe, pale lateral stripes meet at base and fade before middle, distal half dark, with vague cross bars and four or five pairs of widely separated pale spots, venter pale with no marks; *legs* pale, distal joints darker and on posterior pairs very faint dark rings, most distinct on dorsal side, spines, no spines on anterior patellae, posterior pairs, 1 prolateral, 1 retrolateral, I pair, tibia, dorsal, 0, prolateral, 1, retrolateral, 0, ventral, 2 distal, 2-2, both pairs rather slender and the retrolateral row little more than bristles, area between with a thick covering of short hairs, but not as heavy as a scopula, metatarsus, dorsal, 0, lateral, 0, ventral, 2 basal, 2 median, 1 distal, II pair, spines same as on I pair but ventral hairs not as thick on tibia, III and IV tibiae with basal, dorsal spine; *epigynum* a median narrow septum, sides almost parallel and longer than cross piece.

Male. Length, 11.3 mm., ceph. 5.6 mm., abd. 5.5 mm.

Cephalothorax with median pale stripe which starts between p.m.e. and widens to width of p.l.e., gradually narrows to posterior margin, the pair of dark stripes in pale area not as long as in female, and followed on lateral margin by a pair of distinct dots, these can be traced in the female, marginal dark stripe narrower than in female, line of bristles below second and third eye row very distinct; *mandibles*, *labium* and sternum as in female; abdomen very distinctly marked, lateral pale stripes surround median dark spear mark and continue to spinnerets with posterior half crossed by broken chevrons, the pale spots reduced to two or three pairs, venter pale; *legs* pale, distal joints darker, interrupted dark rings can be traced on posterior pairs, spines, all patellae with 1 prolateral and 1 retrolateral spine, dorsal, basal spine on posterior tibiae, I pair, tibia, prolateral, 1, retrolateral, 2, ventral, 2-2-2, all spines large and heavy, metatarsus, dorsal, 0, prolateral, 2, retrolateral, 2, ventral, 2-2, 1 median apical spine; *palpus* as long as cephalothorax, slender, pale, tibia almost twice as long as patella and three-quarters as long as cymbium, tip of cymbium very narrow, the parts of the palpus very much like *Lycosa pratensis* Emerton, but larger.

Holotype ♂ St. Croix, (Beatty)

Allotype ♀ St. Croix, (Beatty)

Paratypes 5 ♀ St. Croix, (Beatty)

This species probably belongs in the same section of the genus as *Lycosa pratensis* Emerton, but it is much larger. The spines on the

legs are not the same in the male and female but the two undoubtedly belong together, as they have the same marks on the cephalothorax and abdomen. The female of *Lycosa pratensis* has the retrolateral row of ventral spines on the first tibia much reduced.

Genus PARDOSA C. Koch 1848

PARDOSA PORTORICENSIS Banks

Pardosa portoricensis Banks, 1901, p. 224, pl. 15, figs. 2, 3. "1 ♀ Porto Rico; San Juan"

2 ♀ St. Croix, (Beatty)

Family OXYOPIDAE

Genus OXYOPES Latreille 1804

OXYOPES SALTICUS Hentz

Oxyopes salticus Hentz, 1845, p. 196, pl. 16, fig. 10; reprint, p. 47, pl. 6, fig. 10. "North Carolina, Alabama"

2 ♂ 2 ♀ St. Croix, (Beatty)

Family SICARIIDAE

Genus SCYTODES Latreille 1804

SCYTODES FUSCA Walckenaer

Scytodes fusca Walckenaer, 1837, 1, p. 272 "♂ ♀ Cayenne"; Petrunkevitch, 1926, p. 29.

5 ♀ St. Croix. U. S. Exper. Stat., (Wilson)

2 ♀ St. Croix, (Beatty)

SCYTODES HEBRAICA Simon

Scytodes hebraica Simon, 1891, p. 568, pl. 42, fig. 14. "♀ St. Vincent"

♀ St. Croix, 6 April 1922, (Wilson)

SCYTODES LINEATIPES Tacz

Scytodes lineatipes Taczanowski, 1873, p. 107. "2 ♀ Cayenne et une des Iles du Salut"

immat. ♀ St. Croix, June 1922, (Wilson)

SCYTODES LONGIPES Lucas

Scytodes longipes Lucas, 1845, p. 71, pl. 1, fig. 2. "♂ Mexique"

♀ St. Croix, 24 April 1922, (Wilson)

immat. ♀ St. Croix, (Beatty)

Family PHOLCIDAE

Genus ARTEMA Walckenaer 1837

ARTEMA ATLANTA Walckenaer

Artema atlanta Walckenaer, 1837, 1, p. 656, "♂ ♀ Amer. merid. . . . du Brazil"; Petrunkevitch, 1926, p. 27.

♀ St. Croix, (Beatty)

Genus MODISIMUS Simon 1893

MODISIMUS MONTANUS Petr.

Modisimus montanus Petrunkevitch, 1929, p. 131, figs. 120-126. "♂ ♀ Porto Rico"

Petrunkevitch described the female as 3.5 mm. long. Seven females and a male were found under rocks between Lares and Yauque and another female at Guainabo. Three females were found by Beatty that probably belong to this species, although they are about half the size, (1.5 mm.). They have the same arrangement of eyes, with a dark stripe from the eye turret to margin of the clypeus and the same epigynum.

3 ♀ St. Croix, (Beatty).

Genus PHYSOCYCLUS Simon 1893

PHYSOCYCLUS GLOBOSUS (Tacz.)

Pholcus globosus Taczanowski, 1873, p. 105. "3 ♀ Cayenne"

♀ St. Croix, 27 March 1922, (Wilson)

Genus SMERINGOPUS Simon 1890

SMERINGOPUS ELONGATUS (Vinson)

Pholcus elongatus Vinson, 1864, p. 135. "♀, ile de la Réunion"

♂ ♀ St. Croix, March, June 1922, (Wilson)

Family DICTYNIDAE

Genus THALLUMETUS Simon 1892

THALLUMETUS PARVULUS spec. nov.

Figures 20, 22, 23

Male. Length, 1.0 mm.

Cephalothorax brown, posterior portion of head with a few gray stripes which meet at beginning of thoracic portion, head very high, a median line of curved bristles from anterior eye row to thoracic portion, radial striae shaded; *eyes*, anterior row straight, a.m.e. small, separated by a diameter, almost touching a.l.e., a.l.e. about twice the diameter of a.m.e., posterior row slightly procurved, almost straight, little longer than anterior row, p.m.e. separated by little less than a diameter, subequal with a.l.e. and separated from p.l.e. by about a radius, lateral eyes touching; *quadrangle* wider behind than in front and as high as wide; *clypeus* higher than diameter of a.l.e. with a few long bristles in middle directed downward; *mandibles* long, swollen at base, median margin excavate about middle; *labium* longer than wide; *sternum* pale, convex, widest between II coxae and pointed between IV coxae, IV coxae separated by a diameter; *abdomen* oval, dorsum flattened, covered with long hairs, a median basal dark stripe which does not reach the middle, with pale lateral stripes almost as wide as dark stripe, these meet and continue to near the spinnerets, lateral margins of pale stripe irregular, venter pale, *spinnerets*, basal pair separated by a scant diameter; *legs*, pale, varying little in length, covered with hairs, no spines; *palpus* pale, shorter than cephalothorax, femur greatly swollen, so that it is more than half as wide as long, with a dark ventral chitinized carina near tip, this evidently rubs on a flattened lobe on ventral side of tibia, patella swollen on dorsal side, tibia very short and almost covered by patella, with a bifid prolateral process much chitinized, cymbium prolonged in a point, bulb circular and a little convex, embolus a stout black spine from near the tip which follows the contour of the cavity to near base.

Female. Length, 1.3 mm.

Cephalothorax same as in the male but the median row of bristles does not extend beyond the posterior eye row; *eyes* and *clypeus* same as in male; *mandibles*, median margin not as much excavate; *sternum* and *legs* the same; *abdomen* larger than in male, covered with short hairs that in some lights are iridescent, lateral pale stripes meet posterior to the dark basal spear mark and end abruptly with a transverse

line about one third from the tip, venter pale, cribellum not divided, calamistrum a single row of 10-12 curved hairs, extends from near base to very near tip of IV metatarsus; *spinnerets* separated, basal pair longest and separated by about two diameters, median pair very small and touching, superior pair about two-thirds as long as basal and separated by more than a diameter; *epigynum* very faintly marked, apparently two oval openings that are separated by at least their long diameter.

Holotype ♂ St. Croix, (Beatty)

Allotype ♀ St. Croix, (Beatty)

Paratype ♂ 2 ♀ St. Croix, (Beatty)

The genus *Thallumetus* was described in the *Histoire Naturelle des Araignées*, 1, p. 241 which was published in October, 1892. It is based on males found in three localities in Venezuela. The genotype species was described in the *Ann. Soc. Ent. France*, 61, p. 434, pl. 9, fig. 7, which was issued in April 1893, six months after the description of the genus. *Thallumetus* is separated from *Dictyna* in both sexes, by the slightly procurved posterior eye row and in the female by the widely separated spinnerets, in the male these are not as widely separated. The male palpus has the femur much enlarged. The genotype is much larger than the St. Croix species and differs in a few minor points. *Thallumetus salax* has the eyes of the anterior row equal and the palpus is figured with the patella slender, while in *Thallumetus parvulus* the eyes of the anterior row are very unequal and the patella of the palpus is greatly swollen on the dorsal side.

Family THERIDIIDAE

Genus LITHYPHANTES Thorell 1870

LITHYPHANTES SEPTEMMACULATUS Keys.

Lithyphantes septemmaculatus Keyserling, 1884, p. 141, pl. 6, fig. 88. "♀ Denver, Colorado; Enterprise, Fla."

♀s St. Croix, (Beatty)

Genus CONOPISTHA Karsch 1881

Three species of the genus *Conopistha* have been found on St. Croix. The males are easily separated by the anterior horn and the palpus. I do not agree with Dr. Petrunkevitch in his description of the species found on Puerto Rico, that the structure of the male palpus is not a

safe character to use in the identification of species, (1930, p. 179). The genus is easily separated, in the males, into two sections by the shape of the cymbium, the first with the distal end of the palpus produced in a prolateral lobe, and the second with the distal end contracted in a rounded tip.

Taczanowski was the first author to recognize the genus in the New World and in "Les Aranéides de la Guyane française", 1872, he describes several species. Of these, probably *nephilae* has been reported most often. Unfortunately, this species was not figured until 1880, when O. P. Cambridge wrote his paper on the genus. It was evident that he never saw the types, and he confused two species. In 1884, Keyserling, who had the Taczanowski types, corrected the error made by Cambridge in "Die Spinnen Amerikas", but for some strange reason this correction has never been followed. Keyserling also suggested that *lugens* and *jucunda*, both described by Cambridge from the Amazons, are the females of *nephilae* Tacz. In the text, Cambridge suggests that *lugens* may be the female of *concinna* which is considered as a synonym of *nephilae* Tacz.

In 1891, Keyserling in "Die Spinnen Amerikas, Brasil," p. 215, renamed the species that Cambridge had misnamed *nephilae* as *cambridgei*. This is the species that is so widely distributed in northern South America, most of the islands of the West Indies and the southern part of the United States.

The females of the genus are not easy to place. The epigynum is often filled with a dark brown substance, so that the openings are impossible to see and the dark color on the venter may extend on the sides or even to the dorsum, so that the color pattern is of little value.

CONOPISTHA CAMBRIDGEI (Keys.)

Figures 21, 24

Argyrodes nephilae, O. P. Cambridge, 1880, p. 324, *nec* Taczanowski, 1872, "♂ ♀ Amazons"; Petrunkevitch, 1929, p. 179, figs. 19-22, *nec* Taczanowski, 1872.

Argyrodes cambridgei Keyserling, 1891, p. 215.

Male. Length, 2.0 mm., ceph. 1.0 mm., abd. 1.0 mm.

Cephalothorax yellowish-brown, flat, two-thirds as wide as long, thoracic groove transverse, anterior horn very slender, starts midway between margin of the clypeus and the eyes, with the ventral surface concave, best seen in a lateral view, tip a rounded knob projects out-

ward, covered with hairs and is as narrow as space between a.m.e.; *eyes* median eyes project forward on a lobe, p.m.e. separated by more than a diameter, lateral eyes touching, about twice as far from space between horn and eye lobe, as a.l.e. plus p.l.e.; *clypeus* vertical from margin to base of horn; *labium* fused to sternum; *sternum* dark brown, triangular, widest between I pair of coxae, IV coxae separated by almost a diameter, lateral margins carried between coxae; *abdomen* silvery, often with a median dark line from base to near tip, posterior part of abdomen high, so that height over spinnerets equals length, tip produced upwards, rather than backwards, tip dark, basal part of abdomen a narrow chitinized ring, with anterior margin roughened, can be seen from dorsal side, venter almost black, with a pair of silvery spots anterior to spinnerets, margin between black venter and silvery sides scalloped; *palpus* pale, as long as cephalothorax, patella swollen dorsally, cymbium with tip widened, with a large hairy prolateral lobe at end, this lobe rounded and not chitinized as in *Conopistha nephilae*, best seen in the figure.

Female. Length, 2.0 mm., ceph. 1.0 mm., abd. 1.0 mm. long, 1.3 mm. high.

Abdomen with the same markings as in the male but often higher.

♂s ♀s St. Croix, (Beatty)

CONOPISTHA CANCELLATUS (Hentz)

Theridion cancellatum Hentz, 1850, p. 278, pl. 19, figs. 17, 18; reprint, p. 149, pl. 16, figs. 17, 18.

♂ ♀ St. Croix, (Beatty)

CONOPISTHA NEPHILAE (Tacz.)

Figures 15, 26

Argyroides nephilae Taczanowski, 1872, p. 114. "♂ ♀ Cayenne, des Iles du Salut et de Saint Laurent de Maroni;" Keyserling, 1884, p. 184, pl. 8, fig. 110.

Argyroides concinna O. P. Cambridge, 1880, p. 322, pl. 38, fig. 2. "♀ Amazons"

Argyroides lugens id., ibid., p. 327, pl. 38, figs. 2a', b', c'. "♀ Amazons"

Argyroides jucunda id. ibid., p. 326, pl. 38, fig. 6. "♀ Amazons"

Conopistha elongata Bryant, 1940, p. 306, figs. 68, 69, 75, 76.

Male. Length, 2.5 mm., ceph. 1.2 mm., abd. 1.3 mm.

Cephalothorax yellowish-brown, flat, quite long and about half as wide as long, thoracic groove transverse and deeply impressed, one-

third nearer posterior margin than anterior, horn starts at margin of clypeus, very wide, narrowed gradually, tip not swollen, turned towards eyes, spoon-shaped, so that eye lobe apparently fits in it, about as wide as eye lobe and covered with short hairs, very little space between eye lobe and horn, ventral surface of horn convex; *eyes*, median eyes carried forward on a lobe, a.m.e. separated by a diameter, lateral eyes touching and at least three diameters of a.l.e. plus p.l.e. from space between horn and eye lobe; *labium* fused to sternum, wider than long; *maxillae* more than twice as long as labium, sides parallel; *sternum* yellowish-brown, triangular, widest between I pair of coxae, carried between II and III coxae and pointed in front of IV coxae, IV coxae touching; *abdomen* silvery, posterior tubercle rounded and directed backward, so that it extends beyond the plane of the spinnerets, a basal chitinized ring, easily seen in dorsal view, for stridulatory organ, carried on to ventral plate, venter infuscate with chitinized spots and lacking the usual silvery spots; *palpus* pale, terminal joint brown, as long as cephalothorax, patella swollen dorsally, twice as long as tibia, cymbium with tip widened and corners produced as lobes, prolateral lobe with tip strongly chitinized, bifid, with margins rolled inward.

Female. Length, 3.1 mm., ceph. 1.1 mm., abd. 2.1 mm. long, 3.4 mm. high.

Abdomen very high, not extending beyond the spinnerets as in the male, but rather upward, tip of abdomen contracted, venter very dark, with the usual pair of silver spots very faint, dark area extends on sides. O. P. Cambridge was undecided if *lugens* was the female of *concinna*, but he notes that both were from the same locality. The same is true of *jucunda*.

Genus *THERIDION* Walckenaer 1805

The genus *Theridion* is based on a European species, and today it harbors a great many species that eventually will be placed in other genera. This particularly, is true of the species found in the West Indies. But until the fauna of more of the islands is known, it is thought best to leave these species in the genus as defined by Simon in the *Histoire Naturelle des Araignées*.

THERIDION BREVIPALPUS spec. nov.

Figures 28, 31, 32

Male. Length, 1.2 mm.

Cephalothorax yellow, shading to brown about the eyes, moderately high, smooth and shining, anterior margin not much narrowed, two very long bristles posterior to lateral eyes and a median row of three very long bristles, no thoracic groove; *eyes* cover the entire width of the head, anterior row slightly recurved, a.m.e. diurnal, slightly larger than a.l.e., separated by more than a radius and slightly nearer the a.l.e., lateral eyes touching, posterior row slightly procurved, each eye surrounded by a copper-red ring, p.m.e. largest of the eight, separated by a radius and from p.l.e. by a little more; *quadrangle* of median eyes higher than wide and narrower in front; *clypeus* about as high as quadrangle and convex; *mandibles* vertical, cone-shaped, fang long, fang groove poorly defined; *labium* brown, fused to sternum, wider than long, tip only slightly narrower than base and not rebordered; *maxillae* twice as long as labium, strongly inclined over labium; *sternum* pale, heart-shaped, strongly convex, IV coxae separated by more than a diameter; *abdomen* triangular, as wide as long, widest at basal third, tip pointed, dorsum flat, brown with no distinct pattern but blotches of cream-white and a darker brown about margins and three pairs of transverse dark bars on distal third, venter a pale brown, spinnerets inconspicuous; *legs*, IV left missing, anterior pairs very long, slender, all legs pale, femora with a wide dark band about middle that fades at distal and basal ends, distal joints almost white, with a broken ventral dark stripe on anterior tibiae, anterior femora slightly incrassate with two parallel ventral rows of small cusps, similar to *Crustulina* and at distal end, two widely separated rows of long slender bristles or spines, these bristles are from a distinct base and when broken, the scar can be seen, a long dorsal bristle at tip of patellae, a long dorsal bristle at middle of tibiae, no long bristles or spines on posterior pairs but rows of colorless hairs, tarsi about half as long as metatarsi, IV tarsus with a comb of 7 or 8 bristles; *palpus* very short, but little longer than the mandibles, femur, patella and tibia white, terminal joint brown, patella and tibia subequal, palpal organ fills the cavity, has no structure that can be seen, but has two slender dark spines at tip.

Holotype ♂ St. Croix, (Beatty)

The generic position of *Theridion brevipalpus* is uncertain. It belongs to the genus *Theridion* in the sense used by Simon in "Histoire Naturelle des Araignées", but it is undoubtedly a new genus as the legs have distinct spines and the palpus is very simple.

Theridion CYBELE spec. nov.

Figure 39

Female. Length, 1.5 mm., ceph. 0.6 mm., abd. 0.9 mm. lon , 1.0 mm. wide.

Cephalothorax pale, with a median gray stripe which starts posterior to the p.m.e. and does not reach the posterior margin, wider than long, no thoracic groove, rather high, posterior fifth falls rapidly to margin; *eyes* cover width of the head, anterior row recurved, a.m.e. diurnal, separated by more than a diameter, a.l.e. smaller and separated from a.m.e. by only a line, posterior row slightly procurved, same length as anterior, each eye surrounded by a red ring, equidistant, p.m.e. separated by fully a diameter and a little larger than p.l.e.; *quadrangle* of median eyes, wider in front and higher than wide; *clypeus* convex, as high as quadrangle, margin dark; *mandibles*, vertical, rather small, pale with a dark stripe on middle margin, no boss, fang weak, impossible to see margin of fang groove; *labium* narrow, much wider than long, fused to sternum; *maxillae* more than twice as long as labium, very slightly inclined; *sternum* pale, convex, two-thirds as wide as long, truncate between IV coxae; *abdomen* wider than long, triangular, dorsum flat, a pair of divergent basal dark spots which soon fade into the white of the dorsum, many small dark dots, from each of which comes a long slender hair, near tip, a pair of converging dark stripes, venter infuscate, with curving dark stripes at base; *legs*, 1-4-2-3, short, pale with dark ventral spots on all joints, distal spots heaviest, a slender dark spine at tip of patellae and middle of tibiae, IV tarsus with a comb of 6 or 7 curved bristles; *epigynum* rather large for so small a spider and protruding from the plane of the venter.

Holotype ♀ St. Croix, (Beatty)

Paratype ♀ St. Croix, (Beatty)

This species does not belong to the genus *Theridion* in the strict sense, as the legs have spines and the epigynum is much more complicated than is usually found in that genus. Because of the spotted legs and the very broad abdomen with the small dark dots, it is a striking species.

THERIDION GUANICAE Petr.

Figure 36

Theridion guanicae Petrunkevitch, 1930, p. 208, figs. 57, 58. "♀ Porto Rico"

This species was described from two females collected from under a rock in a cactus field near the coast at Guanica, Puerto Rico, January 7, 1926 by Dr. Petrunkevitch. A male and a female were found by Beatty at St. Croix. These specimens agree very well with the description except in a few minor points. The eyes are carried forward, best seen in a lateral view, and below the anterior row of eyes there is a groove shown in figure no. 57 as a straight line. The clypeus is convex; sternum convex, with the lateral margins slightly carried between the coxae, posteriorly the sternum is very wide, squarely truncate and carried between the coxae almost to the pedicel. The St. Croix female has the abdomen rather shrunken, so no markings can be traced.

Male. Length, 1.0 mm.

Cephalothorax same as in female, except for a pair of very long bristles below the a.m.e. directed anteriorly and four shorter bristles in a procurved row at the beginning of the thoracic slope; *mandibles*, tooth on the median margin of the fang groove larger than in female; *sternum* pale brown, truncate posteriorly, IV coxae separated by almost two diameters, lateral margins not carried between coxae; *abdomen* whitish, with a faint median gray stripe, scantily covered with long hairs, globose, venter pale; *legs* little paler than cephalothorax, rather short, little difference in length, I pair, tibia and metatarsus with a prolateral and retrolateral rows of long, colorless bristles; *palpus* short, in a ventral view near the tip on the prolateral side is a broad curved truncate piece that supports the embolus.

Allotype ♂ St. Croix, (Beatty)

♀ St. Croix, (Beatty)

The palpus indicates that this species belongs in the same section of the genus as *Theridion unimaculatum* Emerton.

THERIDION MINUTUM (Petr.)

Spintharus minutum Petrunkevitch, 1926, p. 51, fig. 11. "♀ St. Thomas"

Theridion dexteri Petr., 1930, p. 200, figs. 45-50. "♂ ♀ Porto Rico, Campus of University at Rio Piedras"

Male. Length, 1.7 mm.

Female. Length, 2.2 mm.

In both male and female, the head is much higher than is usual in the genus, thoracic groove near the posterior margin, usually marked

by a black dash or line; a.m.e. diurnal, other eyes colorless; abdomen globose, base high, a dirty white, often marked with five small black dots, four in a quadrangle, followed by a fifth in the median line; legs, anterior pairs very long, a black dot each side on patellae and tibiae, with many long colorless hairs and bristles and on the first tibia of both male and female at distal end, a prolateral row of four long spines and a ventral p. row of long bristles, all longer in the male than in the female; *epigynum* in all specimens very lightly chitinized, one specimen, (no. 22, Wilson coll.), shows distinctly the two pairs of circles shown by Petrunkevitch, 1926, fig. 11, but the posterior pair is small and apparently the openings, anterior pair larger and beneath the skin; *palpus* large for the size of the spider, agrees with the Petrunkevitch, 1930, figs. 48, 49, except that no tibial spur can be seen; this spur is figured as large and almost at right angles to tibia, however, the palpal organ agrees with the figure in all parts.

♂ ♀ St. Croix, 28 March 1922, (Wilson)

♂ ♀ St. Croix, (Beatty)

This species is not a *Spintharus*, since the posterior row of eyes is straight, and the genus is based on the strongly procurved posterior eye row. Neither is it a true *Theridion* as the palpus is totally unlike any in the genus and there are true spines on the legs of both male and female.

In the collection sent by Dr. Wilson, there is a male and several females and one cocoon of eggs. The mesh of the cocoon is very loose, so that the eggs can be seen plainly. A note on the original label states that the specimens are always green, even the eggs, "always found as a single individual on a leaf. The web is very small, thin and scarcely visible. The spiders are easily captured. Species rather common."

The species was described from a single female taken by Dr. Shoemaker, July 1915 on St. Thomas. Through the kindness of Dr. Shoemaker, I have been able to examine the type. The specimens collected by Wilson and Beatty on St. Croix, agree with it perfectly, and also with the description of *Theridion dexteri* Petr. 1930 from Puerto Rico.

Theridion virginus spec. nov.

Figure 27

Male. Length, 1.8 mm.

Cephalothorax pale brown, with a converging vague dark stripe from the lateral eyes to about the middle, lateral margins darker, four-fifths as wide as long, thoracic groove a slight transverse depression; *eyes*

cover width of head, each eye surrounded by a bright red ring, anterior row recurved, a.m.e. diurnal, separated by fully a diameter and from a.l.e. by a radius, lateral eyes touching, subequal, posterior row straight, eyes equidistant, p.m.e. separated by a scant diameter, p.l.e. smaller than p.m.e.; *quadrangle* of median eyes wider in front and as high as wide; *clypeus* as high as quadrangle, a slight depression below anterior eye row and then convex to margin; *mandibles* pale, long and attenuate, a slight swelling near base on lateral margin, fang groove short; *labium* fused to sternum, triangular; *maxillae* one and a half times as long as labium, narrow, strongly inclined; *sternum* triangular, as wide as long, pale, margins dark; *abdomen* oval, twice as long as wide, dorsum flat, olive-brown with a pair of narrowly separated, interrupted white stripes, each side much darker from dark blotches, venter infusate, epigastric fold extends beyond the middle, spinnerets inconspicuous; *legs*, III left missing, 1-2-4-3, I pair very long, pale, with a narrow broken dark ring at tip of femur, a small dark spot on patella and at tip of tibia, no spines but rows of colorless hairs, other pairs pale with the same dark spots as on I pair; *palpus* rather short, pale, terminal joint darker, palpal organ filling cavity, with the same parts as in *Theridion frondeum* Hentz.

Holotype ♂ St. Croix, (Beatty)

Theridion virginius belongs near *Theridion frondeum* Hentz, which has been placed in the genus *Phyllonethis*. This genus has been synonymized with *Theridion*, but sometime it may be used as a sub-genus. *Theridion frondeum* was reported by Simon from St. Vincent, 1897. It is not impossible that his spider was the one here described, because *frondeum* is a northern species and has never been reported from any other island of the West Indies.

Family ARGIOPIDAE

Genus ARGIOPE Audouin 1825

ARGIOPE ARGENTATA (Fabr.)

Aranea argentata Fabricius, 1775 2, p. 414. "♀ India"; Petrunkevitch, 1926, p. 29.

♀ St. Croix, (Wilson, Beatty)

ARGIOPE TRIFASCIATA (Forsk.)

Aranea trifasciata Forskal, 1775, p. 40. "♀ Kahirae"

♂ ♀ St. Croix, (Beatty)

Genus ACACESIA Simon 1895

ACACESIA FOLIFERA (Marx)

Epeira folifera Marx, 1890, p. 545.

Epeira foliata Hentz, 1847, p. 475. "♀ Alabama"; preoccupied by Walckenaer, 1837, 2, p. 62.

2 ♀ St. Croix, (Beatty)

Genus CYCLOSA Menge 1866

CYCLOSA OCVLATA (Walck.)

Aranca oculata Walckenaer, 1802, p. 428. "♂ ♀ Paris"

Cyclosa walckenaeri Petrunkevich, 1926, p. 29.

♂ ♀ St. Croix, (Beatty)

Genus EUSTALA Simon 1895

EUSTALA ANASTERA (Walck.)

Epeira anastera Walckenaer, 1837, 2, p. 33. "Georgia, Abbot, Georgia spiders, fig. 381"

♂ ♀ St. Croix, (Beatty)

Genus ERIOPHORA Simon 1894

ERIOPHORA EDAX (Blackwall)

Epeira edax Blackwall, 1863, p. 30. "♂ ♀ Rio Janeiro"

♀ St. Croix, (Beatty)

Genus METEPEIRA F. O. P. Cambridge 1903

METEPEIRA LABYRINTHEA (Hentz)

Epeira labyrinthea Hentz, 1847, p. 471, pl. 31, fig. 3. "♀ North Carolina, Alabama"

Aranicus (Metepeira) labyrinthus Petrunkevitch. 1926, p. 27, "St. Croix, common on telephone wires"

♂ ♀ St. Croix, (Wilson, Beatty)

Genus NEOSCONA Simon 1864

NEOSCONA OAXACENSIS (Keys.)

Epeira oaxacensis Keyserling, 1863, p. 121. "♀ Oaxaca, Mexico"

♂ ♀ St. Croix, (Beatty)

Genus NEPHILA Leach 1815

NEPHILA CLAVIPES (Linn.)

Aranca clavipes Linnaeus, 1767, p. 1034, no. 27. "♀ in America"

Nephila clavipes Petrunkevitch, 1926, p. 30.

♀ St. Croix, (Beatty)

Genus ALCIMOSPHENUS Simon 1895

ALCIMOSPHENUS LICINUS Simon

Alcimosphenus licinus Simon, 1895, p. 951. "♀ Jamaica et S. Domingo"

♀ St. Croix, (Beatty)

Genus LEUCAUGE White 1841

LEUCAUGE ARGYRA (Walck.)

Tetragnatha argyra Walckenaer, 1837, 2, p. 219. "♂ ♀ La Guadeloupe"

Leucauge argyra Petrunkevitch, 1926, p. 29. "common, St. Thomas"

♂ ♀ St. Croix, (Beatty)

LEUCAUGE REGNYI (Simon)

Argyropeira regnyi Simon, 1897, p. 871. "♂ ♀ St. Vincent"

Leucauge regnyi Petrunkevitch, 1926, p. 30. "♀ St. Thomas"

imm. ♀ St. Croix, (Beatty)

Genus TETRAGNATHA Latreille 1804

TETRAGNATHA ANTILLANA Simon

Tetragnatha antillana Simon, 1897, p. 868. "♂ ♀ St. Vincent"

♂ ♀ St. Croix, (Beatty)

TETRAGNATHA PISCATORIA Simon

Tetragnatha piscatoria Simon, 1897, p. 869. "♂ St. Vincent"

♂ St. Croix, (Beatty)

Genus WENDILGARDA Keyserling 1886

WENDILGARDA THERIDIONINA Simon

Wendilgarda theridionina Simon, 1895, p. 919, fig. 986. "♂ ♀ Venezuela;
San-Esteban"

♀ s St. Croix, (Beatty)

Genus GASTERACANTHA Sundevall 1833

GASTERACANTHA TETRACANTHA (Linn.)

Aranea tetracantha Linnaeus, 1767, p. 1037, no. 45. "♀ St. Thomas"

Gasteracantha tetracantha Petrunkevitch, 1926, p. 29. "♂ ♀ St. Thomas"
♀ s St. Croix, (Beatty)

Family GNAPHOSIDAE

Genus TEMINIUS Keyserling 1887

TEMINIUS INSULARIS Keys.

Teminius insularis Keyserling, 1887, p. 422, pl. 6, fig. 1. "♀ Hayti"

Syrisca hirsuta Petrunkevitch, 1926, p. 63, figs. 20, 21, ♂ Sta. Maria Bay,
St. Thomas, July 28; *nec.* Petrunkevitch, 1925, p. 151, figs. 74-76.

Eutychuroides fusca Petrunkevitch, 1926, p. 57, fig. 17. "2 ♀ St. Thomas"

Through the kindness of Dr. Shoemaker, I have been able to examine one of the females of *Eutychuroides fusca* that was used by Dr. Petrunkevitch in his description. It is probably one moult from maturity and was killed soon after moulting, as the spinnerets are extended and apparently longer than in an adult specimen. The maxillae are very faintly impressed, but the specimen agrees in all other respects with the Keyserling type from Haiti.

Dr. Petrunkevitch gives a long, detailed description of the male found on St. Thomas and calls attention to the difference in the eyes and the proportion of the various parts of the palpus from the male described by him from Panama. He also calls attention to the long posterior pair of spinnerets, and the faint depression on the maxillae.

The male and female differ greatly in size and the size of the spines on the anterior pairs of legs. In the female, the three pairs of ventral spines on the first tibia are so slender that they are easily overlooked or recognized only as bristles, in the mass of hairs that cover the joint; this is particularly true of the apical pair. In the male, the covering of hairs is not as thick, and the spines are heavy and much longer than the diameter of the joint, so they are very conspicuous. The male and female have the same pale stripe on the cephalothorax and the basal half of the abdomen, with chevrons on the posterior half.

♀ St. Croix, 30 March 1922, (Wilson)

♂ ♀ St. Croix, (Beatty)

Family SPARASSIDAE

Genus HETEROPODA Latreille 1904

HETEROPODA VENATORIA (Linn.)

Aranea venatoria Linnaeus, 1767, p. 1035. "in America calidiore"

Heteropoda venatoria Petrunkevitch, 1926, p. 30.

♂ s ♀ s St. Croix, (Beatty)

Genus OLIOS Walckenaer 1837

OLIOS ANTIGUENSIS (Keys.)

Sparassus antiguensis Keyserling, 1880, p. 264, pl. 7, fig. 146. "♂ ♀ Antigua"

♂ ♀ St. Croix, (Beatty)

Genus PSEUDOSPARIANTHIS Simon 1887

PSEUDOSPARIANTHIS ANTIGUENSIS Bryant

Pseudosparianthis antiguensis Bryant, 1923, p. 13, pl. 1, fig. 4. "♀ Antigua"

2 ♀ St. Croix, (Beatty)

Family SELENOPIDAE

Genus SELENOPS Latreille 1819

SELENOPS LINDBORGI Petr.

Figures 29, 37

Selenops lindborgi Petrunkevitch, 1926, p. 55, fig. 16. "♀ Sta. Maria Bay, St. Thomas, July 28"

Male. Length, 6.5 mm., ceph. 3.3 mm. long, 3.6 mm. wide, abd. 3.0 mm. long, 2.6 mm. wide.

Cephalothorax pale yellow, darker about the margin, with a row of slender hairs or bristles on margin directed forward, wider than long, very flat, thoracic groove longitudinal and faint, radial striae distinct near groove but disappearing before margin; *eyes* in three groups, four central and two in each lateral group, all eyes heavily ringed in black, eyes of median group in a recurved row, central eyes separated by about three-quarters the diameter of the next eye, posterior lateral eye on a large rounded tubercle, largest of the eight and directed backward, inferior lateral eye very small, about one-half diameter of central eye and about midway between median eye and p.l.e.; *clypeus*

less than a radius of central eye, with a scant fringe of long hairs on margin; *mandibles* vertical, rather small, yellow with stripes of dull gray, boss small and inconspicuous, fang groove oblique, superior margin with three widely separated teeth, inferior margin with two teeth; *labium* yellow, longer than wide, tip rounded, slightly excavate on lateral margins at base; *maxillae* parallel, fully twice as long as labium; *sternum* pale, slightly wider than long, bifid between IV coxae; *abdomen* pale, with lateral and posterior margins gray, flat, anterior margin truncate, venter pale; *legs*, I, II and IV left and III right missing, yellow with no indications of the wide dark bands found in the female, spines much shorter than in female, spines, I pair, patella, 0, tibia, dorsal, 1, prolateral, 2, retrolateral, 2, ventral, 2-2-2-2, distal pair very small, metatarsus, dorsal, 0, prolateral, 1, retrolateral, 0, ventral, 2-2, II pair, tibia, dorsal, 2, prolateral, 2, retrolateral, 2, ventral, 2-2-2, metatarsus, prolateral, 2, retrolateral, 1, ventral, 2-2; *palpus* shorter than cephalothorax, pale, tibia little longer than patella, tibia with no dorsal apophysis, large lateral apophysis as figured.

Allotype ♂ St. Croix, (Beatty)

3 ♀ St. Croix, (Beatty)

It is not impossible that the first leg of the male has been renewed recently, as it is shorter than the second leg and the spines are much smaller.

It is with some hesitation that these specimens are identified as *Selenops lindborgi* Petrunkevitch. The type specimen is from St. Thomas and it is described as 12.3 mm. long, but it may not be adult. In some genera, the penultimate stage is longer than the adult. The three females from St. Croix are all smaller than the dimensions given for the type, as the largest is only 10.0 mm. long, but they agree with the description in the size and position of the eyes and in the spines. The epigynum of one of the specimens is figured. This differs somewhat from the figure of the type, but F. O. P. Cambridge in the Biol. Centr. America, 1900, 2, p. 117, says, "The vulva in *Selenops* varies very much in detail, so that many specimens obviously the young of *S. mexicanus* appear at first sight to belong to entirely different species."

Selenops longipes Petrunkevitch from Puerto Rico, known only from the male, is very near *S. lindborgi*. Dr. Gertsch has kindly sent me drawings of the eyes and the palpus of the type specimen in the American Museum. The median eyes are round, not elliptical as figured and the median eyes touch the neighboring eye as stated in

the text. In the palpus, the long process at the base of the embolus is folded longitudinally and one corner of the tip is prolonged in a sharp point. The various parts of the palpus are very similar in the two species. The greatest difference is in the eyes. It is not impossible that the smaller form of *S. lindborgi* reported by Dr. Petrunkevitch from Puerto Rico is the female of *S. longipes*.

Family THOMISIDAE

Genus MISUMENOPS F. O. P. Cambridge 1900

MISUMENOPS BELLULUS (Banks)

Misumena bellula Banks, 1896, p. 71. "♀ Punta Gorda, Fla."
12 ♂ St. Croix, (Beatty)

Family CLUBIONIDAE

Genus CHIRACANTHIUM C. KOCH 1839

CHIRACANTHIUM INCLUSUM (Hentz)

Clubiona inclusa Hentz, 1847, p. 51, pl. 23, fig. 18. "♀ South Carolina, North Carolina, etc."
♂ 2 ♀ St. Croix, (Beatty)

Genus AYSHA Keyserling 1891

AYSHA TENUIS (L. Koch)

Anyphaena tenuis L. Koch, 1866, p. 211, pl. 9, fig. 140. "♀ St. Domingo"
♂ ♀ St. Croix, (Wilson)
9 ♂ 8 ♀ St. Croix, (Beatty)

Genus CORINNA C. Koch 1842

CORINNA ANTILLANA spec. nov.

Figure 33

Female. Length, 11.2 mm. without mand., ceph. 5.4 mm. long, 3.5 mm. wide, abd. 5.4 mm.

Cephalothorax mahogany-red, darker about eyes, roughened, thoracic groove very distinct; *eyes* cover three-quarters width of head, anterior row straight, a.m.e. largest of the eight, separated by two-thirds of a diameter and from a.l.e. by a diameter and a half, posterior

row straight, little longer than anterior row, eyes subequal, p.m.e. separated by a diameter and a half and from p.l.e. by two diameters and a half; *quadrangle* of median eyes slightly wider in front and not as high as wide; *clypeus* less than a radius of a.m.e.; *mandibles* darker than cephalothorax, roughened, geniculate, boss large, fang groove short, superior margin with three teeth, inferior margin with three large teeth followed by one much smaller, fang short with a thick base; *labium* about as wide as long; *maxillae* not quite twice as long as labium, lateral margins almost parallel; *sternum* rebordered on lateral margins, two-thirds as wide as long, IV coxae separated by half a diameter; *abdomen* a gray-brown, slightly darker at base, cylindrical; *legs*, 4-1-2-3, yellow with distal joints darker, spines, I pair, patella, 0, tibia, dorsal, 0, lateral, 0, ventral, 2-2-2-2-2, metatarsus, dorsal, 0, lateral, 0, ventral, 2-2, with a single median spine at tip, II pair, tibia, ventral, 2-2-2, lr, metatarsus, ventral, 2-2, 1 median apical spine, all metatarsi with ventral apical spine; *epigynum*, large, posterior portion strongly chitinized, anterior portion convex.

Holotype ♀ St. Croix, (Beatty)

Two other species of *Corinna* have been reported from the Virgin Islands. *C. humilis* (Keys.), known from both male and female, has three pairs of ventral spines on the first tibia and two pairs on the metatarsus. *C. cleonei* Petr. known only from the type (♀), has four pairs of spines on the first tibia and two pairs on the metatarsus. *C. antillana* has but three large teeth and one small tooth on the inferior margin of the fang groove but it has five pairs of spines beneath the first tibia and two pairs on the metatarsus and a small median apical spine. Simon described seven species of *Corinna* from St. Vincent, and one has the single apical spine on the metatarsi, although several have three pairs of spines on the first metatarsus.

CORINNA HUMILIS (Keys.)

Hypsinotus humilis Keyserling, 1887, p. 446, pl. 6, fig. 18. "♂ ♀ St. Kitts"

Corinna humilis Petrunkevitch, 1926, p. 30, 4 ♀

2 ♀ St. Croix, (Beatty)

Family SALTICIDAE

Genus *SIDUSA* Peckham 1895*SIDUSA PAVIDA* spec. nov.

Figures 34, 40

Male. Length, 3.0 mm., ceph. 1.6 mm., abd. 1.5 mm.

Cephalothorax brown, almost black about the eyes, with a paler median stripe from dorsal eyes to posterior margin, eye area thickly covered with short white hairs, thoracic groove very short, in a small depression slightly posterior to dorsal eyes, cephalothorax moderately high, highest at dorsal eyes where it continues in same plane half way to margin and then falls rapidly, sides vertical; *eyes*, anterior row recurved, a.m.e. twice the diameter of a.l.e., separated by a line and from a.l.e. by a little more, second row midway between first and third rows, dorsal eyes and a.l.e. subequal, not quite on extreme margin of carapace; *quadrangle* of eyes about two-fifths as wide as long and narrower behind; *clypeus* inclined inward, pale, covered with white scales, almost as wide as diameter of a.m.e.; *mandibles* pale, vertical, anterior surface flat, fang groove very short, transverse, superior margin with two small, black subequal teeth at median margin, best seen from front view, inferior margin not defined and with no tooth, fang from a thick base and longer than groove; *labium* pale, longer than wide; *maxillae* twice as long as labium; *sternum* small, truncate at both ends, two-thirds as wide as long, convex, pale shaded with gray; *abdomen* pale, with a pair of dark lateral stripes with an irregular median margin which forms three pairs of white spots, the largest of which is posterior to middle, median area and sides covered with white hairs, venter pale; *legs*, 4-1-2-3, all patellae with prolateral and retrolateral spines, anterior tarsi and metatarsi subequal, pale, I pair with a broad prolateral dark stripe on patella and tibia, spines, I pair, tibia, dorsal, 0, prolateral, 2, retrolateral, 1 small basal, ventral, 2 apical, 2 median, 1r, metatarsus, dorsal, 0, prolateral, 0, retrolateral, 0, ventral, 2-2, basal pair much more than half the length of the joint, II pair, tibia, dorsal, 0, prolateral, 2, retrolateral, 0, ventral, 2, 1r, 1r, metatarsus, ventral, 2-2, III and IV pairs spiny, tibiae with dorsal basal spine; *palpus*, basal joints pale, not as long as cephalothorax, femur not enlarged, tibia longer than patella, swollen so that it is almost as wide as long, prolateral half covered with short, black hairs, retrolateral with long white hairs, tibial apophysis long, parallel to cymbium, suddenly contracting and ending in a long bristle like tip, embolus a slightly curved spine on opposite side from tibial apophysis.

Holotype ♂ St. Croix, (Beatty)

The generic position of *pavida* is uncertain, but it can be placed in the genus *Sidusa* as construed by F. O. P. Cambridge in the Biol. Centr. America, 1901, 2, p. 196. In it, he placed several of the Peckham genera, irrespective of the number of teeth on the inferior margin of the fang groove, but always with two teeth on the superior margin. According to Simon, all tibiae in the genus *Sidusa* have a dorsal basal spine. Cambridge states that the spine is always found on the posterior pairs but is often missing on the anterior. This species cannot be placed in the genus *Stoidis* Simon, 1901, as the III and IV pairs of legs are not subequal and the clypeus is fairly high and covered with hairs.

Genus PLEXIPPUS C. Koch 1850

PLEXIPPUS PAYKULLI (Audouin)

Attus paykulli Audouin, in Savigny, Deser. Egypte, Nat. Hist., 1826, 1, p. 172.

“♂ Egypte”

Plexippus paykulli Petrunkevitch, 1926, p. 21, 31.

♂ St. Croix, 14 March 1922, (Wilson)

Genus CORYTHALIA C. Koch 1850

CORYTHALIA IRIDESCENS Petr.

Corythalia iridescens Petrunkevitch, 1926, p. 69, figs. 23, 24. “♂ ♀ St. Thomas”

Through the kindness of Dr. Shoemaker, I have been able to examine the types. The species belongs to the genus *Corythalia* in the broad sense, as the third pair of legs are longest and they have a heavy fringe of hairs, but the embolus is not curved. It is apparently subject to great variation in size. The patellae are flattened dorsally, possibly more in the female than in the male. In the male palpus, the patella is half as long as the femur, dorsally flattened and thickly covered with white iridescent scales, tibia seen from above, is less than half as long as patella, with a slender retrolateral apophysis and a ventral apophysis that is not quite at the tip, half hidden by dark hairs and best seen from a lateral view.

Genus HENTZIA Marx 1883

HENTZIA ANTILLANA Bryant

Hentzia antillana Bryant, 1940, p. 494, figs. 285, 289, 294. "♂ ♀ Antigua"
♂ ♀ St. Croix, (Beatty)

Genus STRIDULATTUS Petrunkevitch 1926

STRIDULATTUS STRIDULANS Petr.

Stridulattus stridulans Petrunkevitch, 1926, p. 74, figs. 25-28. "♂ St. Thomas,
July 1915"

Through the kindness of Dr. Shoemaker, I have been able to examine the type, the only specimen known.

The genus has been misplaced and it belongs near *Marpissa*, rather than *Heliophanes*. The diagnosis is misleading; the first coxae are described as far apart but in the description of the species, the coxae are separated by the width of the labium. The latter is correct, as they are separated by a little over a diameter. The sternum is distinctly narrowed between the first coxae. In the Biol. Centr. America, the relative length of the sternum is used to separate genera, but this is a character that does not always hold in all species. There is also a reduction of spines on all legs, both in size and number. On the right first leg, the tibia has one retrolateral spine, a ventral apical pair followed by two on the inner side; the left leg has an additional spine opposite the inner basal spine. All the spines are small and the posterior metatarsi have an apical whorl only.

Genus MENEMERUS Simon 1868

MENEMERUS KOCHI spec. nov.

Figure 30

Female. Length, 4.5 mm., ceph. 2.4 mm., abd. 2.1 mm.

Cephalothorax dark brown, much darker about the eyes, with a rather broad lateral stripe that does not meet at posterior margin, a median stripe of white hairs from a little anterior to thoracic groove to near the posterior margin, moderately high, widest posterior to dorsal eyes, cephalic portion rather flat, a shallow depression between dorsal eyes in which is the short thoracic groove; *eyes*, anterior row slightly recurved, eyes equidistant, a.m.e. large, separated by little more than a line, a.l.e. less than a radius of a.m.e., second row nearer the first than the third row, dorsal eyes convex, subequal with a.l.e., not on extreme margin of carapace; *quadrangle* as wide in front as behind;

clypeus thickly covered with white hairs, narrow, less than a radius of a.m.e.; *mandibles* brown, robust, vertical, fang groove slightly oblique, superior margin with two contiguous black teeth, inferior margin with one black tooth, fang little longer than groove with a thick base; *labium* longer than wide; *maxillae* almost twice as long as labium; *sternum* anteriorly narrowed to width of labium, which is less than a diameter of I coxa, widest between II and III coxae, where it is about half as wide as long, truncate in front of IV coxae; *abdomen* oval, dorsum flat, covered with short pale hairs and longer black ones, a wide white basal band which does not extend on sides, posterior part an orange-red, a white median stripe that just touches basal band, widest posterior to middle, with posterior third much narrowed and broken by three dark chevrons, sides dark, venter pale with dark spots in a median and lateral stripes, area between, with scattered dark spots, largest a pair just anterior to spinnerets, spinnerets long and closely grouped; *legs*, 4-1-2-3, I pair enlarged, femur flattened laterally, femur pale with a wide dark distal band, patella, tibia and metatarsus brown, tarsus pale, spines, patella, 0, tibia, dorsal, 0, lateral, 0, ventral, 2-2-2, metatarsus, dorsal, 0, lateral, 0, ventral, 2-2, II pair colored as I pair, spines, patella, prolateral, 1, tibia, ventral, 2-2-1r, metatarsus, ventral, 2-2, III and IV pairs, brown, spines, patella, prolateral, 1, retrolateral, 1, tibia, scattered, no dorsal, basal spine, metatarsus, 2 whorls, apical and median; palpi pale, with a distinct dark spot at base of three terminal joints; *epigynum* a pair of transverse oval openings anterior to dark sacs beneath the skin, a median inverted chitinized V above the fold separates the sacs.

Holotype ♀ St. Croix, (Beatty)

In 1846, C. Koch described *Marpissa incerta* (♀) from St. Thomas. This has never been found since. It is a little larger than this species, and the description was made when the specimen was dry. It varies in several points other than size, and probably it is not *Menemerus kochi*. Koch describes and figures this species with narrow lateral stripes on the cephalothorax and a wider stripe on anterior portion ending below the dorsal eye, no median stripe. The abdomen is all dark with a narrow lateral white stripe from base to spinnerets and the legs reddish-yellow. No mention is made of the conspicuous dark spots on the palpi.

Genus *HABRONATTUS* F. O. P. Cambridge 1901*HABRONATTUS BRUNNEUS* var. *INSIGNIS* var. nov.

Figures 35, 38

Male. Length, 4.6 mm., ceph. 2.6 mm., abd. 2.3 mm.

Cephalothorax, ocular area thickly covered with white scales and longer dark hairs, sides chestnut-brown, a median brown triangle from posterior margin with apex at groove, each side are inverted triangles of white scales, a narrow marginal line of white scales from below dorsal eyes, sides rounded, widest posterior to dorsal eyes, a recurved depression posterior to eyes; *eyes*, anterior row straight by upper margins, a.m.e. almost touching, a.l.e. about a radius of a.m.e. and separated from them by twice the space between a.m.e., small eyes about midway between first and third rows, dorsal eyes not on extreme margin of carapace and subequal with a.l.e.; *clypeus* covered with white scales, about a diameter of a.m.e. and retreating; *mandibles*, small, cone-shaped and weak, inferior margin with one sharp tooth; *abdomen* oval, dorsum flat, dark, with a broad basal white band that narrows on sides and reaches the spinnerets, a median basal spear mark of white scales that reaches middle, where it connects with a pair of narrow transverse bars, a median white triangle on posterior half and two pairs of widely separated lateral white dots, between basal mark and posterior triangle an indistinct pale chevron, venter pale with a median dark stripe that is widest anterior to spinnerets and heavier lateral stripes that do not reach the middle; *legs*, 3-4-1-2, with I and III pairs modified, all patellae with prolateral and retrolateral spines, I pair dark, with a median stripe of white scales on femur and patella, femur with a prolateral brush of dark hairs with longer white pedicellate hairs, heaviest at distal half and a smaller brush on retrolateral side, ventral side with pedicellate white hairs, patella with prolateral and retrolateral tufts of hairs, tibia with scattered dorsal white scales, a prolateral and a retrolateral brush of dark hairs with longer white pedicellate hairs, metatarsus and tarsus dark, spines, tibia, with two long, heavy, prolateral fusiform spines, metatarsus, ventral, 2-2, II pair, dark with white scales, III pair, femur pale, with a large prolateral dark spot from base to near tip, tip swollen, pale, with a prolateral dark spot that bares a spine, swollen area with a thick dorsal crest of fawn-colored hairs, patella pale, dorsal, distal end modified by two processes, as in *coronatus*, distal process very slender, spines, tibia, dorsal, small median basal spine, ventral, a long, median basal colorless spine; *palpus*, pale, with white scales, tibia shorter than patella, tibial apophysis dark, heavy with a

blunt tip, palpal organ of usual type, bulb convex, circular with the two processes starting near the base on prolateral side, the outer ending at tip.

Female. Length, 7.0 mm., ceph. 3.1 mm., abd. 4.0 mm.

Cephalothorax brown, covered with white scales, thickest on ocular area, where there are also scattered long black hairs, no indications of the white triangles or marginal line found in the male, sides rounded, recurved depression posterior to dorsal eyes; *eyes* same as in male; *clypeus* thickly covered with white scales; *mandibles* same as in male; *abdomen* brown, thickly covered with white scales and longer dark hairs, the posterior white triangle and the posterior pair of lateral spots can be traced, venter, pale with the three dark stripes as in the male; *legs*, 3-4-1-2, not modified, I pair heaviest, brown with scattered white scales, spines, patella, 0, tibia, dorsal, 0, lateral, 0, ventral, 2-2-2, not opposite, retrolateral spines very short, metatarsus, dorsal, 0, lateral, 0, ventral, 2-2, other pairs paler, II patella, 1 retrolateral spine, III tibia, dorsal, no median basal spine, ventral, a median basal spine, dark and not as long as in the male, posterior patellae with prolateral and retrolateral spines; *epigynum* with a median transverse opening followed by diverging dark areas beneath the skin, as in *coronatus*.

Holotype ♂ St. Croix, summer of 1941, (Beatty)

Allotype ♀ St. Croix, summer of 1941, (Beatty)

Paratypes 3♂ St. Croix, summer of 1941, (Beatty)

The type of *Habronattus brunneus* is from Key West, Florida and is in the museum collection. The variety *insignis* agrees in many ways with the type but differs from it principally in color and the secondary characters. The Florida specimen is brown, with no lateral triangles of white hairs on the cephalothorax, possibly from age, although there is no mention of them in the original description. The sternum, coxae and venter are dark brown, so that the four white stripes on the venter are quite conspicuous. It also has a much denser row of dark hairs above the anterior eyes. The variety *insignis* has an almost white sternum, coxae and venter and the four pale stripes mentioned by Peckham are poorly defined. But the difference is most noticeable in the secondary characters; the lateral brushes of dark hairs on the first tibia are heavier, the third leg is longer, with the distal end of the femur more swollen with a larger crest of fawn-colored hairs and the apophyses on the patella are larger. Both have the long colorless ventral spine on the third tibia and the bulb of the palpus is convex, rather than flat. The ventral spine on the third tibia was not noted in earlier descriptions. The female has never been described before.

Unfortunately the original figure of the palpus of *brunneus* is inaccurate. There are two dark spines, as is usually found in the genus, that closely follow the contour of the cavity and are parallel. The drawing shows but one. The tibial apophysis is dark and heavy.

APPENDIX

Other Spiders Reported from the Virgin Islands

For the sake of completeness, all other spiders reported from the Virgin Islands are given below in a systematic list. In no case have the specimens been examined. An asterisk (*) before the name indicates one of the Virgin Islands as the type locality. In every case, the author and the year of the description are given. A second name and date is a reference to the person reporting the species from there.

Sub-order MYGALOMORPHAE

Family CTENIZIDAE

PHAEACLITA FAUNA Simon, 1889; Petrunkevitch, 1926

Family DIPLURIDAE

*MYGALE DRASSIFORMIS C. Koch, 1842 "St. Thomas"

*DIPLURA MACRURA (C. Koch), 1842 "St. Thomas"

Family BARYCHELIDAE

*OBAERARIUS INSULANUS Petr., 1926 "♀ St. Thomas"

Family THERAPHOSIDAE

*CYRTOPHOLIS ACUTISPINA Strand, 1907 "St. Thomas"

CYRTOPHOLIS BARTHOLOMEI (Latreille), 1832; Petrunkevitch, 1926

*ISCHNOCOLUS SHOEMAKERI Petr., 1926 "♀ St. Thomas"

Sub-order ARACHNOMORPHAE

Family DYSDERIDAE

*ARIADNA ARTHURI Petr., 1926 "immat. ♀ St. Thomas"

Family SICARIIDAE

LOXOSCELES RUFIPES (Lucas), 1834; Petrunkevitch, 1926

Family PHOLCIDAE

MODISIMUS GLAUCA Simon, 1893; Petrunkevitch, 1926

Family THERIDIIDAE

THERIDION TEPIDARIORUM C. Koch, 1841; Petrunkevitch, 1926

Family ULOBORIDAE

*MIAGRAMMOPES CILIATUS Petr., 1926 "♀ St. Thomas"

Family ARGIOPIDAE

ARANEUS NAUTICUS (L. Koch), 1875; Petrunkevitch, 1926

LEUCAUGE MANDIBULATA F. O. P. Cambr., 1903; Petrunkevitch, 1926

MICRATHENA MILITARIS (Fabr.), 1775; Petrunkevitch, 1926

MICRATHENA SAGITTATA (Walck.), 1837; Petrunkevitch, 1926

Family CTENIDAE

*ODO AGILIS Simon, 1896 "St. Thomas"

Family GNAPHOSIDAE

*TROCHIANTERIA RANUNCULA Karsch, 1879 "♂ ♀ Sta. Cruz."

Family SPARASSIDAE

OLIOS FASCICULATUS Simon, 1880; Petrunkevitch, 1926

Family CLUBIONIDAE

*CLUBIONA MARITIMA L. Koch, 1866 "♀ St. Thomas"

*CORINNA CLEONEI Petr., 1926 "♀ St. Thomas"

Family SALTICIDAE

*EVOPIHYS VETUSTA C. Koch, 1846 "immat. ♀ St. Thomas"

*MARPISSA INCERTA C. Koch, 1846 "♀ St. Thomas"

MENEMERUS BIVITTATUS (Dufour), 1831; Petrunkevitch, 1926

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